

AGREEMENT NUMBER 11-C0086
REGISTRATION NUMBER

1. This Agreement is entered into between the State Agency and the Contractor named below:

STATE AGENCY'S NAME

Department of Pesticide Regulation (DPR)

CONTRACTOR'S NAME

The Regents of the University of California, on behalf of its Riverside Campus

2. The term of this Agreement is: November 15, 2011 or upon final approval by the State, whichever occurs later, through June 30, 2013

3. The maximum amount of this Agreement is: **\$ 100,000.00**
One Hundred Thousand Dollars and No Cents

4. The parties agree to comply with the terms and conditions of the following exhibits which are by this reference made a part of the Agreement.

Exhibit A – Scope of Work	5 Pages
Exhibit B – Budget Detail and Payment Provisions	4 Pages
Exhibit C* – General Terms and Conditions (GIA 610)	
Exhibit D - Special Terms and Conditions	2 Pages
Exhibit E – Additional Terms and Conditions	1 Page
Exhibit F – Resume(s) of Primary Investigator(s)	7 Pages
Attachment 1 – Federal Agreement # E-00915511-0	10 Pages

Items shown with an Asterisk (*), are hereby incorporated by reference and made part of this agreement as if attached hereto. *These documents can be viewed at <http://www.ols.dgs.ca.gov/Standard+Language/default.htm>*

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

CONTRACTOR

CONTRACTOR'S NAME (if other than an individual, state whether a corporation, partnership, etc.)

The Regents of the University of California, on behalf of its Riverside Campus

BY (Authorized Signature)

Myma A. Lindo

DATE SIGNED (Do not type)

11/1/11

PRINTED NAME AND TITLE OF PERSON SIGNING

Myma A. Lindo

Sr. Contract & Grant Officer

ADDRESS

Office of Research

200 University Office Building, Riverside, CA 92521-0217

STATE OF CALIFORNIA

AGENCY NAME

Department of Pesticide Regulation

BY (Authorized Signature)

Anise Severns

DATE SIGNED (Do not type)

11/4/11

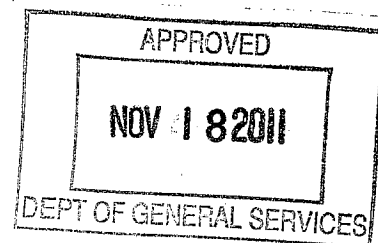
PRINTED NAME AND TITLE OF PERSON SIGNING

Anise Severns, Fiscal Services and Business Operations Manager

ADDRESS

1001 I Street, 4th Floor, Sacramento, CA 95814

California Department of General
Services Use Only



☐ Exempt per:

Richard L. Golding

EXHIBIT A
STANDARD AGREEMENT

SCOPE OF WORK

1. This Agreement is entered into by and between the Department of Pesticide Regulation (DPR) and the Regents of the University of California, on behalf of its Riverside Campus (UCR or Contractor), 900 University Ave, Riverside, CA 92521 through Drs. Les Greenberg (co-PI), Michael K. Rust (co-PI), Department of Entomology, and Jay Gan, Department of Environmental Sciences.
2. This Agreement will commence on the start date November 15, 2011 as presented herein or upon final approval by the State, whichever is later and no work shall begin before that time. This Agreement is of no effect unless approved by the State. Contractor shall not receive payment for work performed prior to approval of the Agreement and before receipt of notice to proceed by the Contract Manager. This Agreement shall expire on June 30, 2013. The services shall be provided during normal working hours, Monday through Friday, except State holidays.
3. The Project Representatives during the term of this Agreement will be:
 - A. All official communications, except invoices, from the Contractor to DPR shall be directed to the attention of the DPR Contract Manager, Mike Ensminger, Ph.D., at:

Department of Pesticide Regulation
Environmental Monitoring Branch
1001 I Street
P.O. Box 4015
Sacramento, CA 95812-4015
Phone 916-324-4186; Fax (916) 324-4405
Email address: mensminger@cdpr.ca.gov

- B. All invoices from the Contractor to DPR shall be directed to:

Department of Pesticide Regulation
Attn: Accounts Payable
P.O. Box 4015, MS 4A
Sacramento, CA 95812-4015

- C. All programmatic communications from DPR to the Contractor shall be directed to:

Dr. Les Greenberg
Department of Entomology, UC Riverside, CA 92521
Phone: 951-827-3217; Fax: (951) 827-3086
Email: Les.greenberg@ucr.edu

EXHIBIT A
STANDARD AGREEMENT

- D. All administrative communications, except payments, from DPR to the Contractor shall be directed to:

Myrna A. Lindo, Senior Contract and Grant Officer
The Regents of the University of California, on behalf of its Riverside campus
200 University Office Building
Riverside, CA 92521-0217

Phone: (951) 827-4815 FAX: (951) 827-4483
Email Address: myrna.lindo@ucr.edu

- E. All payments from DPR to the Contractor shall be directed to:

The Regents of the University of California
University of California, Riverside
Main Cashier's Office
900 University Avenue
Student Services Bldg., Room 1111
Riverside, CA 92521

Phone: (951) 827-3208
Fax: (951) 827-7976

- F. The Project Representatives during the term of this Agreement may be changed by mutual written agreement without the necessity of formal amendment to this Agreement.

4. UCR agrees to perform the services listed below.

A. Background and Goals

Recent monitoring has shown that California urban creeks are commonly contaminated with numerous urban-use pesticides. Creeks may become contaminated during irrigation or storm water runoff. Insecticides in these waters are a concern due to their high level of potential toxicity to aquatic organisms. As chlorpyrifos and diazinon urban use, and corresponding detections in urban surface waters, have decreased, a concurrent increase in pyrethroid (especially bifenthrin), fipronil, and imidacloprid use and detections in urban surface waters has occurred. Little research has been conducted on how to reduce these pesticides from entering into urban surface waters. Some recent work has shown that formulation type or application method may affect runoff, but this work is limited. Additional research is needed in the area of how urban pesticide runoff occurs, especially research studies under controlled conditions with replicated data to allow for statistical analysis. The goals of this work will be to determine the effect of formulation type

EXHIBIT A
STANDARD AGREEMENT

and application (nozzle type) on pesticide runoff from simulated homes and driveways with replicated studies.

B. Work to Be Performed

- 1) **Overview:** The Contractor will perform research to evaluate the pesticide runoff from a constructed wall and an abutting sloping cement pad. The wall and pad are designed to simulate a house and adjacent concrete driveway which would normally carry runoff to the street. Different pesticides and formulations will be applied to the wall and pad and water sprinkled on the wall will lead to runoff collected at the end of the concrete pad.

- 2) **Task 1: Construct Experimental Unit**

The constructed wall will be 36 ft. long and three (3) ft. high and will abut on both sides concrete pads measuring 36 ft. long and ten (10) ft. wide. Irrigation sprayers that deliver known quantities of water per unit time will be attached to the top of the wall so that the sprays are directed onto the wall where pesticide treatments will be done. The concrete pads will have a two percent (2%) slope to allow for water running from the wall onto the concrete to be collected at the bottom of the pads. The pads will be subdivided by metal gutters into three (3) ft. wide segments. The gutters will narrow at the bottom of the pad to allow for collecting of a two (2) liter water sample. Each side of the wall will have twelve (12) experimental units that can serve as replicates, for a total of 24. If we replicate each treatment three (3) times we could have eight (8) different treatments initially.

- 3) **Task 2: Conduct Pesticide Runoff Experiments**

The constructed 36 ft. x three (3) ft. wall and concrete pads allows for 24 experimental units, or eight (8) treatments each replicated three (3) times. Runoff water samples will be collected following pesticide treatments to constructed wall or cement pad. With 24 experimental units, various different possible treatments can be conducted. Possible treatment variables are listed below:

- a. Different pesticides
 - i. Pyrethroids, including bifenthrin and one or two others
 - ii. Fipronil
- b. Different means of application
 - i. Wide band sprays
 - ii. Pin stream narrow bands

EXHIBIT A
STANDARD AGREEMENT

- c. Different formulations
 - i. Liquids
 - ii. Wet and dry foam
 - iii. Microencapsulated
 - d. Persistence of pesticides
 - i. Runoff will be collected over time to see how long significant amounts continue to run off
 - ii. Seasonal effects: winter vs. summer, natural rainfall vs. irrigation during the rainy season
- 4) **Task 3: Analysis of pesticide runoff**
- a. Water analyses. The water collected during the experiments will be sent for analysis to the laboratory of Dr. Jay Gan, Department of Environmental Sciences, where a Specialist, Dr. Pradip Bhattacharyya, will analyze the water according to established techniques.
 - b. Statistics. Each three (3) ft. wide section of concrete is the unit of measurement. There will be at least three (3) replicates per treatment. Post-treatment runoff will be collected at days one (1), fourteen (14), 28, and 56 after treatment. The Analysis of Variance (ANOVA) will be done comparing the treatments for each time period post treatment. The Contractor will provide graphs showing pesticide runoff over time for all of these experiments. Furthermore, repeated ANOVAs on the results over time will also be done to compare the treatments. Other appropriate statistical analyses may also be conducted in lieu of ANOVAs.
- 5) **Task 4: Reporting.**
- a. Provide an annual update.
 - b. Submit a final report of the study results to DPR no less than 30 days prior to the completion of this Agreement.

C. TIMELINE of TASKS

- 1) **Task 1: Construction.** November 15, 2011 – December 1, 2011
Construction of the wall and concrete pads by the University's Agricultural Operations staff. Attach water supply and sprinklers to the wall.
- 2) **Task 2: Initial testing.** December 1, 2011 – January 15, 2012
First pesticide treatments will be done to the wall and concrete to see how readily samples can be collected and for fine tuning the system.
- 3) **Task 3: Initial Pesticide Experiments.** January 15, 2012 – June 30, 2012

EXHIBIT A
STANDARD AGREEMENT

- a. Standard fipronil and bifenthrin spray treatments of wall with fan spray.
 - b. Fipronil and bifenthrin treatments done with narrow pin stream sprays
 - c. Insecticide samples will be collected at 1, 14, 28, and 56 days post-treatment.
- 4) **Task 4:** Further Pesticide Experiments. July 1, 2012 – March 31, 2013
- a. New pyrethroids in addition to bifenthrin
 - b. Fipronil and bifenthrin treatments done with wet foam applicators.
 - c. Tests of microencapsulated bifenthrin
- 5) **Task 5:** Final Pesticide Experiments. April 1, 2013 – June 15, 2013
- a. Additional methods not already tested.
 - b. Disposal of wall and concrete slab.
 - c. Complete and submit final report.

Activities	2011		2012				2013	
		Fall	Winter	Spring	Summer	Fall	Winter	Spring
1. Construction		X						
2. Testing runoff from concrete wall		X	X					
3. Initial pesticide experiments			X	X				
4. Further pesticide experiment.					X	X	X	
5a. Final pesticide experiments							X	X
5b. Dissemination of data and final report								X

D. DPR's Responsibility:

Provide acknowledgment of receipt and review of study report within fifteen (15) days of submission.

EXHIBIT B
Standard Agreement

BUDGET DETAIL AND PAYMENT PROVISIONS

1. Invoicing

- A. For services rendered in accordance with the agreed upon Scope of Work, Exhibit A, and upon receipt and approval of the invoices, DPR agrees to compensate Contractor, in arrears, for actual allowable costs incurred as specified herein and in accordance with the rates specified herein or attached hereto. Incomplete or disputed invoices shall be returned to Contractor, unpaid, for correction.
- B. Itemized invoices shall include the Agreement Number and cost details in accordance with the rates specified herein or attached hereto, and shall be submitted in triplicate, not more frequently than monthly or less than quarterly in arrears, to:

Department of Pesticide Regulation
Attn: Accounts Payable
P.O. Box 4015, MS-4A
Sacramento, CA 95812-4015

2. Budget Contingency Clause

- A. It is mutually agreed that if the Budget Act of the current year and/or any subsequent years covered under this Agreement does not appropriate sufficient funds for the program, this Agreement shall be of no further force and effect. In this event, DPR shall have no liability to pay any funds whatsoever to Contractor or to furnish any other considerations under this Agreement and Contractor shall not be obligated to perform any provisions of this Agreement.
- B. If funding for any fiscal year is reduced or deleted by the Budget Act for purposes of this program, DPR shall have the option to either cancel this Agreement with no liability occurring to DPR, or offer an Agreement Amendment to Contractor to reflect the reduced amount.

3. Payment

- A. Costs for this Agreement shall be computed in accordance with State Administrative Manual (SAM) Sections 8752 and 8752.1.
- B. Nothing herein contained shall preclude advance payments pursuant to Article 1, Chapter 3, Part 1, Division 3, Title 2 of the California Government Code, Sections 11256 and 11257.
- C. Transportation and subsistence costs shall not exceed rates authorized to be paid UC system non-represented employees traveling within California.
- D. Contractor will be reimbursed for direct costs, other than salary costs, that are identified in the Contractor's rates.

EXHIBIT B
Standard Agreement

- E. Contractor will bill in arrears for costs incurred during the billing period. If applicable, salary costs will be itemized and billed by position. Documentation supporting specific salary costs will be presented if requested by DPR. Non-wage costs will be billed, in summary, according to general expense categories. A detailed report of transactions will support the billing. Individual expenditures exceeding \$500.00 will be supported by a photocopy of the original documentation. Documentation in support of expenditures less than \$500.00 will be presented if requested by DPR.
- F. Contractor shall not commence performance of work or services until after this contract has been approved by the State. No payment will be made prior to approval nor for any work performed prior to approval of this Agreement.
- G. Ten percent (10%) of each invoice amount shall be withheld by DPR until the satisfactory completion of this Agreement.

4. Rates

Table I. Expenditures by Budget Line Item

BUDGET ITEM	TOTAL CONTRACT BUDGET
Salaries & Wages	\$50,485
Direct Benefits	\$20,936
Supplies & Materials ¹	\$8,579
Indirect Costs, 25%	\$20,000
Total Cost	\$100,000

¹Includes cost of constructing the wall, pesticides, solvents, sprinkling attachments

Table II. Details on Personnel Costs

Researcher	Time	Cost
Dr. Les Greenberg, Specialist III (\$6,406/m)	Total: 5.25 months	\$33,632
Fringe Benefits, 30%, 32%, 34%		\$10,474
Specialist II (\$3548/m)	Total: 4.75 months	\$16,853
Fringe benefits, @ 60.5%, 62.5%, 64.5%		\$10,462
Total Personnel		\$71,421

EXHIBIT B
Standard Agreement

Table III. Details by Fiscal Year.

ITEM	2011/12 FY	2012/13 FY	TOTAL
Personnel	11/15/11-6/30/12 (8.5 months)	7/1/12-6/30/13 (12 months)	20.5 months
Dr. Les Greenberg, Specialist III			
Base salary: \$6,406	Effort: 26.5%	Effort: 25%	
Months/Total Effort	2.25 months	3 months	5.25 months
Salary	\$ 14,414	\$ 19,218	\$ 33,632
Benefits @ 30 and 32%	\$ 4,324	\$ 6,150	\$ 10,474
Specialist II			
Base salary: \$3548	Effort: 12%	Effort: 31.25%	
Months/Total Effort	1.0 month	3.75 months	4.75 months
Salary	\$ 3,548	\$ 13,305	\$ 16,853
Benefits @ 60.5 and 62.5%	\$ 2,146	\$ 8,316	\$ 10,462
TOTAL Personnel	\$ 24,432	\$ 46,989	\$ 71,421
Materials and Supplies	\$ 6,800	\$ 1,779	\$ 8,579
SUBTOTAL	\$ 31,232	\$ 48,768	\$ 80,000
Indirect Costs @ 25%	\$ 7,808	\$ 12,192	\$ 20,000
TOTALS	\$ 39,040	\$ 60,960	\$ 100,000

5. Cost Limitation

- A. The total amount of this Agreement shall not exceed \$100,000.00.
- B. It is understood and agreed that this total is an estimate and that DPR will pay for only those services actually rendered as authorized by the DPR Contract Manager or his/her designee.

EXHIBIT B
Standard Agreement

6. Agreements Funded in Whole or in Part by the Federal Government

- A. The Contractor shall comply with both the State's provisions and all applicable federal government provisions. In the event that the State's provisions are in conflict with the federal government's provisions, the federal government's provisions shall be controlling.
- B. It is mutually understood between the parties that this contract may have been written for the mutual benefit of both parties before ascertaining the availability of congressional appropriation of funds, to avoid program and fiscal delays that would occur if the contract were executed after that determination was made.
- C. This Agreement is valid and enforceable only if sufficient funds are made available to the State by the United States Government for the current Fiscal Year(s) July 1, 2011 through June 30, 2012 and/or any subsequent years covered under this Agreement for the purposes of this project. In addition, this Agreement is subject to any additional restrictions, limitations, or conditions enacted by the Congress or any statute enacted by the Congress which may affect the provisions, terms or funding of this Agreement in any manner.
- D. The parties mutually agree that if the Congress does not appropriate sufficient funds for the program/project, this contract shall be amended to reflect any reduction in funds.

EXHIBIT D
Standard Agreement

SPECIAL TERMS AND CONDITIONS

1. Termination

- A. Either Party reserves the right to terminate this agreement without cause upon thirty (30) days written notice to the other Party, or immediately in the event of a material breach. In the event of termination, Contractor shall be paid for all allowable costs incurred up to the date of termination, including any non-cancelable obligations
- B. In the event that the total Agreement amount is expended prior to the expiration date, DPR may, at its sole discretion, terminate this Agreement with 30 days notice to contractor.

2. Subcontracting

- A. Contractor shall perform the work contemplated with resources available within its own organization and no portion of the work shall be subcontracted.
- B. Any subcontract in excess of \$25,000, entered into as a result of this Agreement, shall contain all the provisions stipulated in this Agreement to be applicable to Subcontractors.
- C. Any substitution of subcontractors must be approved in writing by the DPR Contract Manager in advance of assigning work to a substitute subcontractor.

3. Dispute Resolution

- A. DPR reserves the right to issue an order to stop work in the event that a dispute should arise, or in the event that the DPR gives the performing agency a notice that this Agreement will be terminated. If DPR exercises this right, the stop-work order will be in effect until the dispute has been resolved or this Agreement has been terminated.
- B. Any dispute concerning a question of fact arising under the terms of this Agreement which is not disposed of within a reasonable period of time by agency employees normally responsible for the administration of this agreement, shall be brought to the attention of the Executive Officer or designated representative of each agency for joint resolution.
- C. The Contractor shall continue to perform all its responsibilities under this agreement during any dispute until notified to stop work or expiration of this Agreement.

4. Harassment Free Workplace

The Department of Pesticide Regulation (DPR) is committed to providing a safe, secure environment, free from sexual misconduct. It is policy of the Department that employees have the right to work in an environment that is free from all forms of

EXHIBIT D
Standard Agreement

discrimination, including sexual harassment. This policy specifically speaks to freedom from a sexually harassing act that results in the creation of an intimidating, hostile or offensive work environment or that otherwise interferes with an individual's employment or work performance. As a Contractor with DPR, you and your staff are expected to comply with a standard of conduct that is respectful and courteous to DPR employees and all other persons contacted during the performance of this Agreement. Sexual harassment is unacceptable, will not be tolerated; and may be cause for prohibiting some or all of the Contractor's staff from performing work under this Agreement.

EXHIBIT E
Standard Agreement

ADDITIONAL PROVISIONS

1. Federal Agreement

- A. This Agreement is resulting from funding under Federal Assistance Agreement No. E-00915511-0 with the U.S. Government. The Federal Assistance Agreement is attached to this contract Agreement as Attachment 1.

Standard Federal regulations specified and listed as part of Attachment 1, including CFRs, and OMB circulars, are not attached hereto, but are expressly incorporated by reference.

- B. The Contractor understands that the State is obligated; in accordance with its Federal Assistance Agreement with the U.S. Government to comply with the provisions of federal regulations contained in Title 40 CFR and any conditions in the agreement and any amendments thereto. In order to ensure the State can meet these obligations the Contractor agrees to all general and special conditions contained in the Assistance Agreement.
- C. In addition the Contractor agrees that affirmative steps will be taken to assure that qualified small, minority, and women's businesses (MBE/WBE) are used, when possible, as sources of supplies, equipment and subcontracting services, if applicable, under this Agreement.

2. Contractor Evaluation

The Contractor is hereby notified that its performance under this Agreement will be evaluated within thirty (30) calendar days following the Expiration of this Agreement. The evaluation may include statements on the adequacy of the service or the product, whether the service was satisfactory, whether the service or the product was provided or completed within the time limitations, reasons for time or cost overruns, whether the product is operational or being utilized by the State, and/or the State plans for implementation, and the State's general impression as to the competency of the Contractor and its staff. The evaluation shall be filed in the State's official Contractor Evaluation File.

3. Consulting Services

- A. The Contractor is hereby advised of its duties, obligations and rights under Public Contract Code § 10335.5.
- B. The Contractor's key personnel assigned to perform work under this Agreement and their level of responsibility shall be mutually acceptable to the State and the Contractor.

4. Disposition of Work Product

DPR retains use and non-commercial governmental distribution rights to all deliverables identified in Exhibit A of this Agreement.

EXHIBIT F Standard Agreement

Dr. Les Greenberg
Specialist III
Department of Entomology
College of Natural and Agricultural Sciences
University of California
Riverside, CA 92521

les.greenberg@ucr.edu

Education

PhD Entomology 1981, University of Kansas
MA Biology 1975, City College, NY
BS Biology 1967, Brooklyn College

Research Area

Red imported fire ant research and extension program for UC Riverside since the arrival of the pest in California in 1988. Control of Argentine ants and red imported fire ants in urban and agricultural environments. Research in methods to improve monitoring for fire ants and to find replacements for organophosphates and other pesticides that are contaminating runoff water as well as the use of liquid sugar water baits in bait stations. Evaluation of newer pesticides and biocontrol agents that are not yet available in California. Other research involves studying flight behavior of the red imported fire ant in California, both in the laboratory and the field. Recent projects included studying the Sex pheromone of the slave making ant, *Polyergus breviceps*.

Publications

Greenberg, L., M. K. Rust, J. H. Klotz, D. Haver, J.N. Kabashima, S. Bondarenko, and J. Gan. Impact of ant control technologies on insecticide runoff and efficacy. 2010. Pesticide Science. DOI 10.1002/ps.1970.

Costa, H.S., L. Greenberg, J.H. Klotz, and M.K. Rust. 2005. Response of Argentine ants and red imported fire ants to permethrin-impregnated plastic strips: foraging rates, colonization of potted soil, and differential mortality. J. Econ. Entomol. 98(6): 2089-2094

Greenberg, L., A. Aliabadi, S. McElfresh, H. Topoff and J. Millar. 2004. Sex pheromone of the slave-making ant, *Polyergus breviceps*. J. Chem. Ecol. 30(6): 1297-1303.

Greenberg, L., D. Reiersen and M.K. Rust. 2003. Fipronil trials in California against the red imported fire ant, *Solenopsis invicta* Buren, using sugar water consumption and mound counts as measures of ant abundance. J. Urban and Agricultural Entomology. 20(4): 221-233.

Peloquin, J.J. and L. Greenberg. 2003. Identification of midgut bacteria from fourth instar red imported fire ant larvae, *Solenopsis invicta* Buren (Hymenoptera: Formicidae). J. Urban and Agricultural Entomology. 20(3): 157-164.

EXHIBIT F
Standard Agreement

Klotz, J.H., M.K. Rust, D. Gonzalez, L. Greenberg, H. Costa, P. Phillips, C. Gispert, D.A. Reiersen and K. Kido. 2003. Directed sprays and liquid baits to manage ants in vineyards and citrus groves. *J. Urban and Agricultural Entomology*. 20: 31-40.

Greenberg, L. 2003. Fire ants. *In: Encyclopedia of Insects*. V.H. Resh and R.T. Carde, eds., Academic Press, 414-416.

Klotz, J.H., K. Jetter, L. Greenberg, J. Hamilton, John Kabashima and D.F. Williams. 2003. An insect pest of agricultural, urban and wildlife areas: The red imported fire ant. *In: Exotic Pests and Diseases: Biology and Economics for Biosecurity*. Daniel A. Sumner, editor. Iowa State Press, pp. 151-166.

Costa, H., L. Greenberg, J. Klotz, and M.K. Rust. 2001. Monitoring the effects of granular insecticides for argentine ant control in nursery settings. *J. Urban and Agricultural Entomology*. 18: 13-22.

Klotz, J.H., L. Greenberg, C. Amrhein and M.K. Rust. 2000. Toxicity and repellency of borate-sucrose water baits to Argentine ants (Hymenoptera: Formicidae). *J. Economic Entomol.* 93: 1256-1258.

Klotz, J.H., L. Greenberg and G. Venn. 2000. Evaluation of two hydramethylnon granular baits for control of Argentine ants (Hymenoptera: Formicidae). *Sociobiology* 36: 201-107.

Greenberg, L. and J.H. Klotz. 2000. Argentine ant trail pheromone enhances consumption of liquid sucrose solution (Hymenoptera: Formicidae). *J. Economic Entomol.* 93: 119-122.

Greenberg, L., J. Kabashima, J.H. Klotz and C. Wilen. 1999. The red imported fire ant in California. *Pacific Coast Nurseryman*. 58: 69-73.

Klotz, J.H., L. Greenberg, B.L. Reid and L. Davis, Jr. 1998. Spatial distribution of colonies in three carpenter ants, *Camponotus pennsylvanicus*, *C. flordanus*, and *C. laevigatus* (Hymenoptera: Formicidae). *Sociobiology*. 32: 51-62.

Klotz, J.H., L. Greenberg and E.C. Venn. 1998. Liquid boric acid bait for control of argentine ants (Hymenoptera: Formicidae). *J. Economic Entomol.* 91: 910-914.

Klotz, J.H., L. Greenberg, H.H. Shorey and D.F. Williams. 1997. Alternative control strategies for ants around homes. *J. Agric. Entomol.* 14: 249-257.

EXHIBIT F Standard Agreement

Dr. Michael K. Rust
Professor of Entomology
Department of Entomology
College of Natural and Agricultural Sciences
University of California
Riverside, CA 92521

Education

PhD Entomology 1975 University of Kansas
M MA Entomology 1973 University of Kansas
BA Biology 1970 Hiram College, Ohio

Research Area

Urban entomology is the study of insects and arthropods associated with people in cities. At UC Riverside, the goals are to explore the basic biology of pests that attack stored foods, museum objects, fiber, structures, and pets and to develop integrated pest management strategies. Students conduct research on the biology and control of ants, cockroaches, fleas, yellowjackets, and termites, which represent the major economic pests in urban settings worldwide. In recent years, there has been an increasing awareness and interest in the use of alternative pest control technologies that reduce the amount of insecticide used. Ongoing projects include the use of baits to control ants in urban and agricultural areas, baiting and soil treatments to control subterranean termites, nutrient dynamics and food flow in subterranean termite and ant colonies, and the development of IPM programs to control yellowjackets. Recent studies conducted by our students include the response of ants to barrier treatments, nutrient and bait dynamics in ant and termite colonies, physiological ecology of drywood termites, insecticide resistance in cat flea populations, and interactions between ants and dead nestmates (necrophoresis). Our approach to urban pest management has always emphasized innovative and creative research. Student research topics balance both basic and applied aspects, ensuring maximum exposure and training to the field of urban entomology. We explore conventional as well as novel methods of pest management emphasizing the reduction in the use of pesticides. Little is known about the biology and ecology of most major urban insect pests. The urban pest management practices of the future have yet to be exploited.

Awards

2010 Entomological Society of America, Pacific Branch, Integrated Pest Management Team Award
2008 - Entomological Society of America Recognition Award in Entomology, Pacific Branch
2007 - Pest Control Hall of Fame
2002 - PCT/Zeneca Leadership Award
2002 - PCT/Syngenta Leadership Award
2002 Fellow of the American Association for the Advancement of Science

EXHIBIT F Standard Agreement

2000 - Pest Control Technology's 25 Most Influential People in the Industry
2000 - Mallis Recognition Award, National Conference on Urban Entomology
1999-2000 - UC Presidential Scholar in Entomology
1999-2001 - Presidential Chair in Entomology
1995 - Book of Professional Services Award Pi Chi Omega
1995 - Excellence in Entomology Award -California Association, American Registry of Professional Entomologists
1994 W. W. Woodworth Award, Pacific Branch, Entomological Society of America
1993 Distinguished Achievement Award in Urban Entomology, Entomological Society of America
1990, 1995, 1997 - Orkin Research Award
1990, 1991, 1993 - Outstanding Urban Entomologist Award, Pacific Branch, Entomological Society of America

Publications

Greenberg, L., M. K. Rust, J. H. Klotz, D. Haver, J.N. Kabashima, S. Bondarenko, and J. Gan. Impact of ant control technologies on insecticide runoff and efficacy. 2010. Pesticide Science. DOI 10.1002/ps.1970.

Choe, D.-H., Rust, M.K. 2008, Horizontal transfer of insecticides in the laboratory colonies of the Argentine ant (Hymenoptera). J. Econ. Entomol. 101: 1397-1405.

Rust, M.K., Saran, R.K. 2008. The toxicity, repellency, and effects of acetamiprid on the western subterranean termite (Isoptera: Rhinotermitidae). J. Econ. Entomol. 101: 1360-1366

Saran, R.K., Rust, M.K. 2008. Phagostimulatory sugars enhance uptake and horizontal transfer of hexaflumuron in the western subterranean termite (Isoptera: Rhinotermitidae). J. Econ. Entomol. Vol. 101: p.873-879.

Kabashima, J.N., Greenberg, L., Rust, M.K., Paine, T.D. 2007. Aggressive interactions between *Solenopsis invicta* and *Linepithema humile* (Hymenoptera: Formicidae) under laboratory conditions. J. Econ. Entomol. Vol. 100: p.148-154

Saran, R.J., J.G. Millar, and M K. Rust. 2007. Role of (3Z,6Z,8E) – Dodecatrien-1-ol in trail following, feeding, and mating behavior. J. Chem. Ecol. 33: 369-389.

Choe, D.-H. and M.K. Rust. 2007. Use of plant resin by a bee assassin bug *Apiomerus flaviventris* (Hemiptera:Reduviidae). Ann. Entomol. Soc. Am.100: 320-326.

Choe, D.-H, and M. K. Rust. 2006. Agonistic behavior of Argentine ants to scales and scale parasitoids and their cuticular extracts. Sociobiology 48: 799-818.

Choe, D.-H. and M.K. Rust. 2006. Homopteran chemical signatures reduce aggression of tending ants. Chemoecology 16: 175-178.

EXHIBIT F
Standard Agreement

Saran, R.J. and M.K. Rust. 2005. Feeding, uptake, and utilization of carbohydrates by the western subterranean termite (Isoptera: Rhinotermitidae). J. Econ. Entomol. 98: 1284-129

Haagsma, K. and M. K. Rust. 2005. Effect of hexaflumeron on mortality of the western subterranean termite (Isoptera: Rhinotermitidae) during and following exposure and movement of hexaflumeron in termite colonies. Pest Manage. Sci. 61: 517-531.

Soeprono, A. M. and M. K. Rust. 2004. The effect of delayed toxicity of chemical barriers to control Argentine ants (Hymenoptera: Formicidae). J. Econ. Entomol. 97: 2021-2028.

Soeprono, A. M. and M. K. Rust. 2004. Effect of horizontal transfer of barrier insecticides to control Argentine ants (Hymenoptera: Formicidae). J. Econ. Entomol. 97: 1675-1681.

Hooper-Bui, L. M., M. K. Rust, and D. A. Reiersen. 2004. Predation of endangered California least tern, *Sterna antillarum browni* by southern fire ant, *Solenopsis xyloni* (Hymenoptera: Formicidae). Sociobiology 43: 1-18.

Vega, S. Y., and M. K. Rust. 2003. Determining the foraging range and origin of resurgence after treatment of Argentine ant (Hymenoptera: Formicidae). J. Econ. Entomol. 96: 844-849.

Fernandez, N. and M. K. Rust. 2003. Site fidelity in foraging Argentine ants. Sociobiology 41: 625-632.

Metzger, M.E. and M. K. Rust. 2001. Laboratory evaluation of fipronil and imidacloprid topical insecticides for control of plague vector *Oropsylla montana* (Baker) (Siphonaptera: Ceratophyllidae and Pulicidae) of California ground squirrels (Rodentia: Sciuridae) using a novel nest box. J. Med. Entomol. 38: 465-470.

EXHIBIT F
Standard Agreement

Dr. Jay Gan, Water Quality Specialist
Department of Environmental Toxicology
University of California
Riverside, CA 92521

Education

Ph.D., Zhejiang University, China, 1988

Specialization:

Environmental fate, risk assessment and regulation of pesticides and emerging contaminants.

Processes of organic contaminants in ecosystems, including biotic and abiotic degradation, adsorption, bioavailability, aquatic bioaccumulation, and ecotoxicity.

Detoxification and remediation of organic contaminants.

Evaluation and development of best management practices.

Method development for trace contaminant analysis.

Representative Publications:

Books

Gan, J., P. Zhu, S.D. Aust, and A.T. Lemley. Pesticide Decontamination and Detoxification. American Chemical Society Symposium Series 863, American Chemical Society: Washington, DC, 2003.

Gan, J., F. Spurlock, P. Hendley, and D. Weston. *Synthetic Pyrethroids: Occurrence and Effects in Aquatic Environments*. American Chemical Society Symposium Series 991, American Chemical Society: Washington, DC, 2003.

Journal Articles (selected from 150+)

Gan, J., Q. Wang, S.R. Yates, W.C. Koskinen and W.A. Jury. 2002. Dechlorination of chloroacetanilide herbicides by thiosulfate salts. *PNAS (USA)* 99: 5189-5194.

Liu, W.P., J. Gan, D. Schlenk and W.A. Jury. 2005. Enantioselectivity in environmental safety of current chiral insecticides. *PNAS (USA)* 103: 701-706.

EXHIBIT F
Standard Agreement

Yang, W.C., F. Spurlock, W.P. Liu, and J. Gan. 2006. Inhibition of aquatic toxicity of synthetic pyrethroids by suspended sediment. *Environ. Toxicol. Chem.* 25: 1913-1919.

Xu, Y.P., F. Spurlock, Z.J. Wang, and J. Gan. 2007. Comparison of five methods for measuring sediment toxicity of hydrophobic contaminants. *Environ. Sci. Technol.* 41: 8394-8399.

Hunter, W., Y. Yang, F. Reichenberg, P. Mayer, and J. Gan. 2009. Measuring pyrethroids in sediment porewater using matrix-solid phase microextraction. *Environ. Toxicol. Chem.* 28: 36-43.

Budd, R., A. O'Geen, K. Goh, S. Bondarenko, and J. Gan. 2009. Efficacy of constructed wetlands in pesticide removal from tailwaters in the Central Valley, California. *Environ. Sci. Technol.* 43: 2925-2930.

Bondarenko, S., and J. Gan. 2009. Simultaneous determination of free and total concentrations of hydrophobic compounds. *Environ. Sci. Technol.* 43: 3772-3777.

Yang, Y., W. Hunter, S. Tao, and J. Gan. 2009. Microbial availability of different forms of phenanthrene in soils. *Environ. Sci. Technol.* 43: 1852-1857.

Lin, K.D., W.P. Liu, and J. Gan. 2009. Oxidative removal of bisphenol-A with manganese dioxide: Kinetics, products, and pathways. *Environ. Sci. Technol.* 43: 3860-3864.

Cui, X.Y., W. Hunter, Y. Yang, Y.X. Chen, and J. Gan. 2010. Bioavailability of sorbed phenanthrene and permethrin in sediments to *Chironomus tentans*. *Aquatic Toxicol.* 98: 83-90


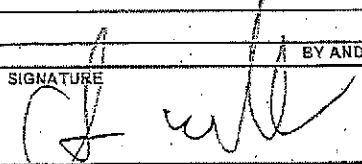
Courses Taught:

ENSC 127 - Fate and Transport of Contaminants in Soil (upper division)

SWSC 204 - Environmental Organic Chemistry (graduate)

**Attachment 1
Standard Agreement**

E - 00915511 - 0 Page 1.

	U.S. ENVIRONMENTAL PROTECTION AGENCY Cooperative Agreement		ASSISTANCE ID NO.		DATE OF AWARD 07/09/2010	
			PRG	DOC ID		AMEND#
			E -	00915511		- 0
			TYPE OF ACTION Continuation			
RECIPIENT TYPE: State			Send Payment Request to: Las Vegas Finance Center, Fax (702) 796-2423			
RECIPIENT: CA Dept of Pesticide Reg 1001 I Street Sacramento, CA 95812 EIN: 68-0325102			PAYEE: CA Dept of Pesticide Reg 1001 I Street Sacramento, CA 95812			
PROJECT MANAGER David McCarty 1001 I Street Sacramento, CA 95812 E-Mail: dmccarty@cdpr.ca.gov Phone: 916-323-4993		EPA PROJECT OFFICER Fabiola Estrada 75 Hawthorne Street, CED-5 San Francisco, CA 94105 E-Mail: estrada.fabiola@epa.gov Phone: 415-972-3493		EPA GRANT SPECIALIST Linda Struna Grants Management Office, MTS-7 E-Mail: Struna.Linda@epa.gov Phone: 415-972-3723		
PROJECT TITLE AND DESCRIPTION SFY 11-13 - PESTICIDE CONSOLIDATED COOPERATIVE AGREEMENT The purpose of this agreement is to support the State in ensuring that pesticides are manufactured, sold, used, and stored according to federal and state laws. This agreement aims to improve the understanding and compliance with pesticide laws and regulations, protecting human health and the environment by implementing activities related to compliance, certification and training, and field program activities related to endangered species, water quality and worker safety. This agreement provides partial federal funding in the amount of \$1,308,450.						
BUDGET PERIOD 07/01/2010 - 05/30/2013		PROJECT PERIOD 07/01/2010 - 05/30/2013		TOTAL BUDGET PERIOD COST \$4,554,302.00		
				TOTAL PROJECT PERIOD COST \$4,534,302.00		
NOTICE OF AWARD						
Based on your application dated 05/10/2010, including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA), hereby awards \$1,308,450. EPA agrees to cost-share % of all approved budget period costs incurred, up to and not exceeding total federal funding of \$1,308,450. Such award may be terminated by EPA without further cause if the recipient fails to provide timely affirmation of the award by signing under the Affirmation of Award section and returning all pages of this agreement to the Grants Management Office listed below within 21 days after receipt, or any extension of time, as may be granted by EPA. This agreement is subject to applicable EPA statutory provisions. The applicable regulatory provisions are 40 CFR Chapter 1, Subchapter B, and all terms and conditions of this agreement and any attachments.						
ISSUING OFFICE (GRANTS MANAGEMENT OFFICE)			AWARD APPROVAL OFFICE			
ORGANIZATION / ADDRESS U.S. EPA, Region 9 Grants Management Office, MTS-7 75 Hawthorne Street San Francisco, CA 94105			ORGANIZATION / ADDRESS U.S. EPA, Region 9 Communities and Ecosystems Division, CED-1 75 Hawthorne Street San Francisco, CA 94105			
THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY						
SIGNATURE OF AWARD OFFICIAL Digital signature applied by EPA Award Official		TYPED NAME AND TITLE Carolyn Truong, Grants Management Officer		DATE 07/09/2010		
AFFIRMATION OF AWARD						
BY AND ON BEHALF OF THE DESIGNATED RECIPIENT ORGANIZATION						
SIGNATURE 		TYPED NAME AND TITLE Mary-Ann Warner, Director		DATE 8/26/2010		

EPA Funding Information

Page 2

FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
CPA Amount This Action	\$	\$ 1,308,450	\$ 1,308,450
CPA In-Kind Amount	\$	\$	\$ 0
Unexpended Prior Year Balance	\$	\$	\$ 0
Other Federal Funds	\$	\$	\$ 0
Recipient Contribution	\$	\$ 1,072,152	\$ 1,072,152
State Contribution	\$	\$	\$ 0
Local Contribution	\$	\$	\$ 0
Other Contribution	\$	\$	\$ 0
Allowable Project Cost	\$ 0	\$ 2,380,602	\$ 2,380,602

Assistance Program (CFDA)	Statutory Authority	Regulatory Authority
68.700 - Consolidated Pesticide Compliance Monitoring	FIFRA: Sec. 23(a)	40 CFR PTS 31 & 35 SUBPT A

[illegible]

Attachment 1 Standard Agreement

E - 00915511 - 0 Page 3

Budget Summary Page

Table A - Object Class Category (Non-construction)	Total Approved Allowable Budget Period Cost
1. Personnel	\$1,642,247
2. Fringe Benefits	\$607,633
3. Travel	\$84,279
4. Equipment	\$0
5. Supplies	\$16,500
6. Contractual	\$1,075,287
7. Construction	\$0
8. Other	\$123,438
9. Total Direct Charges	\$3,549,384
10. Indirect Costs: % Base See Terms and Conditions #7.	\$1,014,918
11. Total (Share: Recipient % Federal %.)	\$4,564,302
12. Total Approved Assistance Amount	\$1,308,450
13. Program Income	\$0
14. Total EPA Amount Awarded This Action	\$1,308,450
15. Total EPA Amount Awarded To Date	\$1,308,450

PRC #401 - Discretionary (PISP, WHS Promotora, WHS PISP, San Luis Obispo, and PM Stanislaus)

Table A - Object Class Category (Non-construction)	Total Approved Allowable Budget Period Cost
1. Personnel	\$8,981
2. Fringe Benefits	\$3,322
3. Travel	\$0
4. Equipment	\$0
5. Supplies	\$0
6. Contractual	\$157,147
7. Construction	\$0
8. Other	\$0
9. Total Direct Charges	\$169,450
10. Indirect Costs	\$5,550
11. Total (Share: Recipient % Federal %.)	\$175,000
12. Total Approved Assistance Amount	\$175,000
13. Program Income	\$0

PRC #501 - Enforcement (Lab Funding) and WHS Enforcement

Table A - Object Class Category (Non-construction)	Total Approved Allowable Budget Period Cost
1. Personnel	\$950,304
2. Fringe Benefits	\$351,609
3. Travel	\$79,883
4. Equipment	\$0
5. Supplies	\$16,500
6. Contractual	\$341,600
7. Construction	\$0
8. Other	\$123,438
9. Total Direct Charges	\$1,863,134
10. Indirect Costs	\$587,292
11. Total (Share: Recipient % Federal %.)	\$2,450,426
12. Total Approved Assistance Amount	\$724,101
13. Program Income	\$0

Attachment 1
Standard Agreement

E - 00915511-0 Page 4

PRC #401 - Workers Health & Safety Core, Water, and Endangered Species

Table A - Object Class Category (Non-construction)	Total Approved Allowable Budget Period Cost
1. Personnel	\$147,072
2. Fringe Benefits	\$54,420
3. Travel	\$4,596
4. Equipment	\$0
5. Supplies	\$0
6. Contractual	\$441,900
7. Construction	\$0
8. Other	\$0
9. Total Direct Charges	\$647,988
10. Indirect Costs	\$90,894
11. Total (Share: Recipient % Federal %.)	\$738,882
12. Total Approved Assistance Amount	\$209,350
13. Program Income	\$0

PRC #401 - Certification & Training

Table A - Object Class Category (Non-construction)	Total Approved Allowable Budget Period Cost
1. Personnel	\$535,890
2. Fringe Benefits	\$196,282
3. Travel	\$0
4. Equipment	\$0
5. Supplies	\$0
6. Contractual	\$134,840
7. Construction	\$0
8. Other	\$0
9. Total Direct Charges	\$866,812
10. Indirect Costs	\$331,182
11. Total (Share: Recipient % Federal %.)	\$1,199,994
12. Total Approved Assistance Amount	\$199,999
13. Program Income	\$0

**Attachment 1
Standard Agreement**

E-00915511-0 Page 5

Administrative Conditions

1. An Interim Federal Financial Report (FFR), Standard Form 425, covering the period from "project/budget period start date" to June 30 of each calendar year shall be submitted to the U.S. EPA Las Vegas Finance Center, PO Box 98515, Las Vegas, NV 89193-8515, no later than September 30 of the same calendar year. The initial interim FFR is due September 30, 2011. The final FFR covering the entire project period shall be submitted within 90 days after the end of the project period according to the recipient's respective Code of Federal Regulations Part 30.52(a)(1)(iv) and 30.71(a), or Part 31.23(b) and 31.41(b) (as applicable). The LVFC will make adjustments, as necessary, to obligated funds after reviewing and accepting a final Federal Financial Report. Recipients will be notified and instructed by EPA if they must complete any additional forms for the closeout of the assistance agreement.
2. In accordance with OMB Circular A-133, which implements the Single Audit Act, the recipient hereby agrees to obtain a single audit from an independent auditor if it expends \$500,000 or more in total Federal funds in any fiscal year. Within nine months after the end of a recipient's fiscal year or 30 days after receiving the report from the auditor, the recipient shall submit a copy of the SF-SAC and a Single Audit Report Package. For fiscal periods 2002 to 2007 recipients are to submit hardcopy to the following address:

Federal Audit Clearinghouse
1201 East 10th Street
Jeffersonville, IN 47132

For fiscal periods 2008 and beyond the recipient MUST submit a copy of the SF-SAC and a Single Audit Report Package, using the Federal Audit Clearinghouse's Internet Data Entry System. Complete information on how to accomplish the 2008 and beyond Single Audit Submissions you will need to visit the Federal Audit Clearinghouse Web site: <http://harvester.census.gov/fac/>.

3. The recipient agrees to comply with the requirements of EPA's Program for Utilization of Small, Minority and Women's Business Enterprises in procurement under assistance agreements as set forth in 40 CFR Part 33. The EPA DBE rule can be accessed at <http://www.epa.gov/osbp>. In addition, the recipient agrees to make good faith efforts whenever procuring construction, equipment, services and supplies under an EPA assistance agreement, and to ensure that sub-recipients, loan recipients, and prime contractors also comply with 40 CFR Section 33.301. Records documenting compliance with the six good faith efforts shall be retained.

The recipient accepts the applicable MBE/WBE fair share objectives/goals negotiated with EPA by the California State Water Resources Control Board as follows:

	MBE	WBE
Construction	24%	6%
Equipment	22%	26%
Services	30%	31%
Supplies	29%	20%

By signing this financial assistance agreement, the recipient is accepting the fair share objectives/goals stated above and attests to the fact that it is purchasing the same or similar construction, supplies, services and equipment, in the same or similar relevant

Attachment 1 Standard Agreement

geographic buying market as California State Water Resources Control Board.

Pursuant to 40 CFR Section 33.404, the recipient has the option to negotiate its own MBE/WBE fair share objectives/goals. If the recipient wishes to negotiate its own MBE/WBE fair share objectives/goals, the recipient agrees to submit proposed MBE/WBE objectives/goals based on an availability analysis, or disparity study, of qualified MBEs and WBEs in their relevant geographic buying market for construction, services, supplies and equipment.

The submission of proposed fair share goals with the supporting analysis or disparity study means that the recipient is not accepting the fair share objectives/goals of another recipient. The recipient agrees to submit proposed fair share objectives/goals, together with the supporting availability analysis or disparity study to Joe Ochab, MTS-1, the Regional MBE/WBE Coordinator, within 120 days of acceptance of the financial assistance award. EPA will respond to the proposed fair share objectives/goals within 30 days of receiving the submission. If proposed fair share objectives/goals are not received within the 120 day time frame, the recipient may not expend its EPA funds for procurements until the proposed fair share objectives/goals are submitted.

A recipient of a Continuing Environmental Program Grant or other annual grant agrees to create and maintain a bidders list. A recipient of an EPA financial assistance agreement to capitalize a revolving loan fund also agrees to require entities receiving identified loans to create and maintain a bidders list if the recipient of the loan is subject to, or chooses to follow, competitive bidding requirements. Refer to 40 CFR Section 33.501 (b) and (c) for specific requirements and exemptions.

4. The recipient agrees to complete and submit to the Grants Management Office, MTS-7, a MBE/WBE Utilization Report (EPA Form 5700-52A), within 30 days after the end of the Federal fiscal year; i.e., by October 30 of each calendar year. Negative reports are required. Only procurements with certified MBE/WBEs are counted towards a recipient's MBE/WBE accomplishments. A final MBE/WBE report must be submitted within 90 days after the end of the project period. Your grant cannot be officially closed without all MBE/WBE reports. EPA Form 5700-52A may be obtained from the EPA Office of Small Business Program's Home Page on the Internet at www.epa.gov/osbp.

5. Payment to consultants. Per 40 CFR Part 31.36(j), EPA's participation in the salary rate (excluding overhead and travel) paid to individual consultants retained by recipients or by a recipient's contractors or subcontractors shall be limited to the maximum daily rate for a Level IV of the Executive Schedule, to be adjusted annually. This limit applies to consultation services of designated individuals with specialized skills and if the terms of the contract provide the recipient with responsibility for the selection, direction, and control of the individuals who will be providing services under the contract at an hourly or daily rate of compensation. As of January 1, 2010, the rate is \$596 per day and \$74.50 per hour. This rate does not include overhead or travel costs and the recipient may pay these in accordance with its normal travel practices.

Subagreements with firms or individuals for services which are awarded using the procurement requirements in 40 CFR Parts 30 or 31, as applicable, are not affected by this limitation unless the terms of the contract provide the recipient with responsibility for the selection, direction, and control of the individuals who will be providing services under the contract at an hourly or daily rate of compensation. See 40 CFR Part 31.36(j)(2) or Part 30.27(b).

Attachment 1 Standard Agreement

6. To implement requirements of Section 106 of the Trafficking Victims Protection Act of 2000, as amended, the following provisions apply to this award:

a. We, as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity: (1) is determined to have violated an applicable prohibition in the Prohibition Statement below; or (2) has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in the Prohibition Statement below through conduct that is either: (a) associated with performance under this award; or (b) imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 1532. You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in the Prohibition Statement below.

b. Our right to terminate unilaterally that is described in paragraph a of this award term: (1) implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and (2) is in addition to all other remedies for noncompliance that are available to us under this award.

c. You must include the requirements of the Prohibition Statement below in any subaward you make to a private entity.

Prohibition Statement - You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not engage in severe forms of trafficking in persons during the period of time that the award is in effect; procure a commercial sex act during the period of time that the award is in effect; or use forced labor in the performance of the award or subawards under the award.

7. The recipient agrees that indirect costs authorized in this award will be charged in accordance with the Negotiated Indirect Cost Rate Agreement (ICA). Indirect costs are not authorized and may not be requested for reimbursement for periods not covered by the Negotiated ICA.

8. The recipient agrees to comply with Title 40 CFR Part 34, *New Restrictions on Lobbying*. The recipient shall include the language of this provision in award documents for all subawards exceeding \$100,000, and require that subrecipients submit certification and disclosure forms accordingly.

In accordance with the Byrd Anti-Lobbying Amendment, any recipient who makes a prohibited expenditure under Title 40 CFR Part 34 or fails to file the required certification or lobbying forms shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure.

9. The recipient shall ensure that no grant funds awarded under this assistance agreement are used to engage in lobbying of the Federal Government or in litigation against the United States unless authorized under existing law. The recipient shall abide by its respective 2 CFR 220, 225, or 230 (formerly OMB Circular A-21, A-87, or A-122), which prohibits the use of federal grant funds for litigation against the United States or for lobbying or other political activities.

10. In accordance with the policies set forth in EPA Order 1000.25 and Executive Order 13423 (Strengthening Federal Environmental, Energy and Transportation

Attachment 1 Standard Agreement

Management dated January 24, 2007), the recipient shall use recycled paper and double sided printing for all reports which are prepared as a part of this agreement and delivered to EPA. This requirement does not apply to reports prepared on forms supplied by EPA, or to Standard Forms, which are printed on recycled paper and are available through the General Services Administration.

Any State agency or agency of a political subdivision of a State shall also comply with the requirements set forth in Section 6002 of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6962), which requires that preference be given in procurement programs to the purchase of specific products containing recycled materials identified in guidelines developed by EPA. These guidelines are listed in 40 CFR 247. Regulations issued under RCRA Section 6002 apply to any acquisition of an item where the purchase price exceeds \$10,000 or where the quantity of such items acquired in the course of the preceding fiscal year was \$10,000 or more.

11. The recipient agrees to ensure that all conference, meeting, convention, or training space funded in whole or in part with Federal funds complies with the protection and control guidelines of the Hotel and Motel Fire Safety Act (PL 101-391, as amended). Recipients may search the Hotel-Motel National Master List at <http://www.usfa.dhs.gov/applications/hotel/> to see if a property is in compliance (FEMA ID is currently not required), or to find other information about the Act.

12. The recipient organization of this EPA assistance agreement must make an ongoing, good faith effort to maintain a drug-free workplace pursuant to the specific requirements set forth in Title 40 CFR 36.200 - 36.230. Additionally, in accordance with these regulations, the recipient organization must identify all known workplaces under its federal awards, and keep this information on file during the performance of the award.

Those recipients who are individuals must comply with the drug-free provisions set forth in Title 40 CFR 36.300.

The consequences for violating this condition are detailed under Title 40 CFR 36.510. Recipients can access the Code of Federal Regulations (CFR) Title 40 Part 36 at http://www.access.gpo.gov/nara/cfr/waisidx_06/40cfr36_06.html.

13. The recipient shall fully comply with Subpart C of 2 CFR Part 180 and 2 CFR Part 1532, entitled "Responsibilities of Participants Regarding Transactions (Doing Business with Other Persons)." The recipient is responsible for ensuring that any lower tier covered transaction as described in Subpart B of 2 CFR Part 180 and 2 CFR Part 1532, entitled "Covered Transactions," includes a term or condition requiring compliance with Subpart C. The recipient is responsible for further requiring the inclusion of a similar term or condition in any subsequent lower tier covered transactions. The recipient acknowledges that failing to disclose the information as required at 2 CFR 180.335 may result in the delay or negation of this assistance agreement, or pursuance of legal remedies, including suspension and debarment.

Recipient may access the Excluded Parties List System at www.epls.gov. This term and condition supersedes EPA Form 5700-49, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters."

14. EPA's financial obligations to the recipient are limited by the amount of federal funding awarded to date as shown on line 15 in its EPA approved budget. If the recipient incurs costs in anticipation of receiving additional funds from EPA, it does so

Attachment 1 Standard Agreement

at its own risk.

15. Management fees or similar charges in excess of the direct costs and approved indirect rates are not allowable. The term "management fees or similar charges" refers to expenses added to the direct costs in order to accumulate and reserve funds for ongoing business expenses, unforeseen liabilities, or for other similar costs which are not allowable under this assistance agreement. Management fees or similar charges may not be used to improve or expand the project funded under this agreement, except to the extent authorized as a direct cost of carrying out the scope of work.

16. Congress has prohibited EPA from using its FY 2010 appropriations to provide funds to the Association of Community Organizations for Reform Now (ACORN) or any of its subsidiaries. None of the funds provided under this agreement may be used for subawards/subgrants or contracts to ACORN or its subsidiaries. Recipients should direct any questions about this prohibition to their EPA Grants Management Office.

Programmatic Conditions

P1. The funds awarded under this assistance agreement are from multiple Program Results Codes (PRCs). The recipient agrees to account for, track and request payment separately for each PRC as follows:

- a) Enforcement (501E12E) = \$2,089,103;
- b) Worker Safety (C&T & WPS)/Endangered Species/Water Quality (401C09E)
= \$1,403,047.

In addition, the recipient will submit an attachment to the Federal Financial Report (FFR) showing the breakdown for each PRC.

P2. The U.S. EPA will be substantially involved in overseeing and monitoring this cooperative agreement. Involvement includes oversight of pesticide programs including pesticide enforcement, endangered species and worker safety (agricultural worker protection and applicator certification). For example:

Pesticide Enforcement: Under FIFRA Section 23 states may cooperate in the enforcement authority for pesticide use inspections by entering into a cooperative agreement with EPA and maintaining an effective program for enforcing pesticide use regulations. As such, EPA has oversight responsibilities to ensure that basic elements of the enforcement program are carried out adequately including, but not limited to:

- review and recommend improvements to pesticide inspections;
- monitor state investigation and enforcement response on significant pesticide incidents;
- issue federal inspector credentials to state employees consistent with EPA policy and guidance;
- review and comment on inspection files which are submitted to Region 9 (Market Place and Producer Establishment Inspections);
- request additional information when needed for federal case development;
- provide inspector training to state inspectors;
- issue special investigation requests for state inspectors to conduct inspections on EPA's behalf;

Attachment 1 Standard Agreement

Pesticide Applicator Certification: EPA reviews and approves the state plan for certifying restricted use pesticide applicators.

Worker Protection Standard: Ensures that OPP/OECA Guidance for baseline worker protection programs is conducted and activities reported.

P3. The California Department of Pesticide Regulation (CDPR) is reporting per national program guidance for Enforcement (35.230), C&T (35.240), and Pesticide Program Implementation (35.250).

The recipient agrees to submit quarterly progress reports to the EPA Project Officer within 30 calendar days after the end of each Federal fiscal quarter (October 30, January 30, April 30, and July 30). These reports should include a discussion of the activities conducted during the quarter and progress towards milestones, problems encountered and their resolution, and activities planned for the next quarter. In addition, CDPR will inform EPA as soon as problems, delays or adverse conditions become known which will materially impair the ability to meet the outputs/outcomes specified in the assistance agreement work plan. CDPR will report per national program guidance for Enforcement (35.230), C&T (35.240), and Pesticide Program Implementation (35.250). National Guidance includes reporting on national program measures (enforcement and C&T). Within 90 days of the end of the project period, the recipient must submit a final report documenting project activities over the entire project period and the recipient's achievements with respect to the project's purposes and objectives.

P4. This grant includes the performance of environmental measurements; a Quality Assurance Program Plan must be prepared. The recipient should consult with the Region 9 Quality Assurance Office to determine what guidance should be followed. The QA Plan must be approved by the EPA Project Officer, the Region 9 Quality Assurance Manager, and the recipient's Quality Assurance Officer before measurement activities are undertaken. Contact the QA Office at 415-972-3411.

P5. Funds awarded under this cooperative agreement may not be used to purchase or pay for pesticide applications or pesticides.

--- END OF DOCUMENT ---